

## Fermentation

1) Ethanol is a fuel obtained by fermenting glucose ( $\text{C}_6\text{H}_{12}\text{O}_6$ ).

Discuss the process of fermenting glucose into ethanol. In your answer, you should:

- draw a diagram showing the chemical structure of ethanol
- fully explain how the fermentation process works
- write a balanced symbol equation for the process.

2) Two uses of alcohols are in beverages (such as beer and wine), and as fuels.

Alcoholic beverages are made with **ethanol**. One way of making ethanol is by the process of fermentation.

(a) Give an account of the process of fermentation.

Your answer should include:

- the starting materials used and the products which are formed
- the conditions required for fermentation to occur
- a word equation for the fermentation reaction, showing all the reactants and products.